

Amendments to the Claims

1. (Currently amended) A method of securing messages exchanged over a data transmission network between a server (1) and a small client (2), the small client comprising a smart card or a mobile communication system, wherein the small client does not have the resources necessary for providing security functions, the method being performed under the control of an authority that defines message exchange rules, the method comprising providing control in a decentralized manner by a representative (3) of the authority, and setting up communication between the client and the server only via the representative of the authority, ~~wherein the representative of the authority is inserted permanently into the network in the vicinity of the client (2) and between the server (1) and the client (2) during the secure exchange of messages,~~ wherein the client is connected to a network of the server only through the representative of the authority, and wherein the representative of the authority is used throughout all transactions established between the client and the server, and wherein the representative of the authority translates messages transmitted between the server and the client and applies verifications decided on by the authority to said transmitted messages.

2. (Previously presented) The method according to claim 1, further comprising using a first protocol (P) for exchanges between the server (1) and the representative (3) of the authority, and using a second protocol (P') different from the first protocol (P) for exchanges between the representative (3) of the authority and the client (2).

3. (Previously presented) The method according to claim 1, further comprising:

setting up a first secure channel (4) between the server (1) and the representative (3) of the authority, using a first key (K_s) known to the representative (3) of the authority and to the server (1) but not to the client (2), and using a first encryption algorithm (AL), and

setting up a second secure channel (5) between the representative (3) of the authority and the client (2), using a second key (K_c) known to the representative (3) of the authority and to the client (2) but not to the server (1), and using a second encryption algorithm (AL').

4. (Currently amended) A device comprising a server (1) and a small client (2) that does not have the resources necessary for providing a security function, the small client comprising a smart card or a mobile communication system, the small client being under the control of an authority that defines message exchange rules, the device also comprising means for securing messages exchanged over a data transmission network between the server and the small client, the securing means comprising a decentralized control device or representative (3) of the authority, *the representative of the authority being inserted permanently into the network in the vicinity of the client (2) and between the server (1) and the client (2) during the secure exchange of messages, to set up communication between the client and the server only via the representative of the authority, wherein the client is connected to a network of the server only through the representative of the authority, and wherein the representative of the authority is used throughout all transactions established between the*

client and the server to translate messages transmitted between the server and the client, and to apply verifications decided on by the authority to said transmitted messages.

5. (Currently amended) The device according to claim 4, wherein the decentralized control device or representative (3) of the authority is a data processing microsystem secured by hardware/ *inserted permanently between the server (1) and the client (2) during the exchange of messages.*

6. (Previously presented) The device according to claim 5, wherein:
the server (1) is a data processing system comprising an input-output port (1a);

the client (2) is a data processing microsystem comprising an input-output port (12);

the representative (3) of the authority is a data processing microsystem secured by hardware and comprising an interface device (13);

a dedicated interface system (7) is provided, comprising an input-output port (8) connected to the input-output port (1a) of the server data processing system (1), comprising a card port (9) connected to the input-output port (12) of the client data processing microsystem (2), comprising an input-output port (10) connected to the interface device (13) of the representative (3) of the authority data processing microsystem, and comprising a controller (11) programmed to control communication between the input-output ports (8), (9) and (10);

the controller (11) and the representative (3) of the authority are programmed so that:

the server data processing system (1) sends a request A to the client

data processing microsystem (2), and that request is received by the controller (11);

the controller (11) transmits the request A to the representative (3) of the authority, which sends it back a response Ra;

the controller (11) uses that response Ra to calculate a request A' that is sent to the client data processing microsystem (2);

the client data processing microsystem (2) processes the request A' to prepare a response B';

the client data processing microsystem (2) sends the response B' to the server data processing system (1); that response is received by the controller (11);

the controller (11) transmits the response B' to the representative (3) of the authority, which sends it back a response Rb;

the controller (11) uses that response Rb to calculate a response B that is sent to the server data processing system (1).

7. (Previously presented) The device according to claim 6, wherein:
the client (2) is a first smart card;
the representative (3) of the authority is a second smart card;
the dedicated interface system is a smart card reader (7) comprising two card ports (9) and (10).

8. (Previously presented) The device according to claim 6, wherein:
the client (2) is a mobile communication system;
the server (1) is a data processing system communicating with the client (2) via a physical connection or via a wireless communication network;

the representative (3) of the authority is a smart card representing

the operator of the wireless communication network (known as the SIM card in telephones conforming to the GSM standard).

9. (Previously presented) The device according to claim 6, wherein:
the client (2) is a smart card;

the representative (3) of the authority is a data processing system secured by hardware;

the dedicated interface system (7) is a machine comprising a card port (9) and a dedicated input-output interface (10) for connection to the representative (3) of the authority data processing system.